

**REMARKS**

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-20 are presently active in this case. The present Amendment amends Claims 1-5, 8-12 and 15-19 without introducing any new matter.

The outstanding Office Action rejected Claims 1 and 7 under 35 U.S.C. §102(a) as anticipated by Applicants' admitted prior art (herein "AAPA"). Claim 2 was rejected under 35 U.S.C. §103(a) as unpatentable over AAPA in view of Raphaeli et al. (U.S. Publication No. 2003/0103521, herein "Raphaeli"). Claims 8, 14, 15 and 20 were rejected under 35 U.S.C. §103(a) as unpatentable over AAPA in view of Nguyen (U.S. Patent No. 5,838,748). Claims 9 and 16 were rejected under 35 U.S.C. §103(a) as unpatentable over AAPA in view of Nguyen and further in view of Raphaeli.

Claims 3-6, 10-13 and 17-19 were indicated as allowable if rewritten in independent form. Applicants acknowledge with appreciation the indication of allowable subject matter. However, since Applicants consider that independent Claims 1, 8 and 15, from which Claims 3-6, 10-13 and 17-19 depend, define patentable subject matter, Claims 3-6, 10-13 and 17-19 are maintained in dependent form at the present time.

In order to better comply with U.S. claim drafting practice, Claims 1-5, 8-12 and 15-19 are amended. Since these changes are only formal in nature, they are not believed to raise any questions on new matter.

In response to the rejection of Claims 1 and 7 under 35 U.S.C. §103(a) as anticipated by AAPA and in order to clarify Applicants' invention, independent Claim 1 is further amended to recite "a detection circuit, coupled to an output end of the demodulation unit" and "a standby period timer, coupled to an output end of the detection circuit." Independent Claims 8 and 15 recite similar features and are amended in accordance with the amendments

to Claim 1. Accordingly, Applicants respectfully traverse the rejection and request reconsideration of the rejection, as discussed next.

The outstanding Office Action states that the claimed demodulation unit corresponds to synchronizing/demodulating unit 13, and the detection circuit corresponds to frame receiving unit 17 of AAPA.<sup>1</sup> However, frame receiving unit 17 of AAPA receives final received data from the Vitarbi decoder 16, and is not connected to an output end of synchronizing/demodulating unit 13.<sup>2</sup> Further, the standby period timer of AAPA is not connected to the output end of the frame receiving circuit 17.<sup>3</sup> Moreover, Applicants' claimed detection circuit detects final data included in a receiving data stream, and outputs a final data notification signal when detecting the final data. However, frame receiving circuit 17 of AAPA only activates the standby period timer when receiving the final received data from Vitarbi decoder 16, and does not output a final data notification signal.<sup>4</sup> Therefore, AAPA does not teach or suggest all the features of Applicants' independent Claim 1 and accordingly Applicants request reconsideration of the rejection of Claims 1 and 7 under 35 U.S.C. § 103(a).

In response to the rejection of Claims 8, 14, 15 and 20 under 35 U.S.C. §103(a) as unpatentable over AAPA in view of Nguyen, Applicants respectfully traverse the rejection and request reconsideration of the rejection, as discussed next.

Briefly recapitulating, Applicants' amended Claims 8 and 15, recite a detection circuit that is connected to the output end of a demodulation unit and further recites a standby period timer that is connected to the output end of the detection circuit.

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<sup>1</sup> See the outstanding Office Action from page 2, line 18 to page 3, line 13.

<sup>2</sup> See Applicants' Disclosure in Figure 7.

<sup>3</sup> See Applicants' Specification at page 5, lines 12-20 and in corresponding Figure 7.

<sup>4</sup> See Applicants' Specification at page 5, lines 18-20.

Turning now to the applied references, Nguyen teaches a wired communication interface for RS 232 and modem connections.<sup>5</sup> However, Applicants respectfully submit that Nguyen does *not* disclose a detection circuit coupled to the output end of a demodulation unit and also does *not* disclose a standby period timer coupled to the output end of the detection circuit. The outstanding Office Action confirms that the claimed detection circuit is not disclosed in AAPA,<sup>6</sup> but further states that Nguyen discloses “a communication system wherein the end of the data frame is monitored according to a symbol count (fig. 5, col. 10, lines 57-68).”<sup>7</sup> Applicants respectfully disagree. Nguyen counts the number of data bytes, but this count is for detecting the starting point of a command code word detected by the network (CUE code)<sup>8</sup> and further Nguyen is silent on the setting of the standby period, as claimed by Applicants.

Therefore, even if the combination of the teachings of AAPA and Nguyen is assumed to be proper, the combination fails to teach every element of the claimed invention. Specifically, the combination fails to teach the claimed detection circuit coupled to the output end of a demodulation unit and also fails to teach or suggest the claimed standby period timer coupled to the output end of the detection circuit. Accordingly, Applicants respectfully traverse, and request reconsideration of, this rejection of Claims 8, 14, 15 and 20 based on these references.<sup>9</sup>

In addition, Applicants respectfully traverse the obviousness rejection based on AAPA and Nguyen because there is insufficient evidence for a motivation to modify AAPA’s radio data transmission system by correctly timing the transmission of data for IEEE 802.11

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<sup>5</sup> See Nguyen et al. for example at column 6, lines 15-48 and in corresponding Figure 1.

<sup>6</sup> See the outstanding Office Action at page 4, lines 14-16.

<sup>7</sup> See the outstanding Office Action at page 4, lines 16-18,

<sup>8</sup> See Nguyen at column 10, lines 57-66.

<sup>9</sup> See MPEP 2142 stating, as one of the three “basic criteria [that] must be met” in order to establish a *prima facie* case of obviousness, that “the prior art reference (or references when combined) must teach or suggest all the claim limitations,” (emphasis added). See also MPEP 2143.03: “All words in a claim must be considered in judging the patentability of that claim against the prior art.”

compliance by incorporating Nguyen's wired network communication for using RS-232,<sup>10</sup> for the following reasons.<sup>11</sup>

The outstanding Office Action states that the proposed modification would have been obvious "to one having ordinary skill in the art at the time the invention was made to count the number of symbols of demodulated data in a frame in the device of the AAPA according to the teachings of Nguyen because the end of the frame and [the] start of the interframe symbol could be accurately detected."<sup>12</sup> The record, however, fails to provide the required *evidence* of a motivation for a person of ordinary skill in the art to perform such modification. Assuming arguments that Nguyen provides a reason for counting the number of bytes to change the status of the CUE control line in a wired network,<sup>13</sup> Nguyen fails to suggest why a person of ordinary skill in the art would be motivated to incorporate such a feature in a radio transmission control device for IEEE 802.11 compliance, such as the one disclosed in AAPA. In particular, Nguyen uses the counting of the number of bytes in order to change the status of the CUE line so that a CUE word can be detected in a low-speed, wired network.<sup>14</sup> Nguyen, however, does not suggest that the counting of bytes for detecting a CUE code word would work in a radio transmission control device for timing the transmission and reception of data packets.

In addition, AAPA is not concerned with the detection of CUE code words in a tactical terminal adapter (TTA). Instead, AAPA is concerned with the timing of starting and finishing the transmitted data for the compliance with IEEE 802.11. AAPA states that its

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<sup>10</sup> See Nguyen in the Abstract and in column 5, lines 54-60.

<sup>11</sup> See MPEP 2143.01 stating "[o]bviousness can only be established by combining or modifying the teaching of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art," (citations omitted). See also MPEP 2144.08 III stating that "[e]xplicit findings on motivation or suggestion to select the claimed invention should also be articulated in order to support a 35 U.S.C. 103 ground of rejection. . . Conclusory statements of similarity or motivation, without any articulated rational or evidentiary support, do not constitute sufficient factual findings."

<sup>12</sup> See outstanding Office Action at page 5, lines 4-8.

<sup>13</sup> See Nguyen for example at column 10, lines 48-66 and in corresponding Figure 5.

<sup>14</sup> See Nguyen at column 6, lines 3-30 and from column 10, line 48 to column 11, line 6.

structure already achieves the goal of detecting the finishing point for the received data.<sup>15</sup> In particular, AAPA does not suggest adding CUE code words, such as those disclosed in Nguyen.

AAPA and Nguyen, therefore, do not provide the motivation to perform the proposed modification of AAPA. In other words, an attempt to bring in the isolated teaching of Nguyen's byte count for CUE code word detection into AAPA would amount to improperly picking and choosing features from different references without regard to the teachings of the references as a whole.<sup>16</sup>

Furthermore, it is not clear from the record how Nguyen's byte count for detecting CUE code words could be incorporated into AAPA. Under such a modification, AAPA would have to use CUE code words of a tactical terminal adapter used with data modems of the speed of 1200-9600 baud or serial RS-232 communications.<sup>17</sup> Such modification would require a substantial reconstruction or redesign of the elements of AAPA, and/or would change the basic principle of operation of AAPA. There is no evidence that a person of ordinary skill in the art would be motivated to perform such changes and redesign.<sup>18</sup>

In response to the rejection of Claim 2 under 35 U.S.C. §103(a) over AAPA in view of Raphaeli and the rejection of Claims 9 and 16 under 35 U.S.C. §103(a) over AAPA in view of Nguyen and further in view of Raphaeli, since independent Claims 1, 8 and 15 are also believed to be patentably distinct over the applied references, all the dependent claims

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<sup>15</sup> See AAPA for example at page 2, lines 5-17.

<sup>16</sup> See In re Ehrreich 590 F2d 902, 200 USPQ 504 (CCPA, 1979) (stating that patentability must be addressed "in terms of what would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the sum of all the relevant teachings in the art, not in view of first one and then another of the isolated teachings in the art," and that one "must consider the entirety of the disclosure made by the references, and avoid combining them indiscriminately.")

<sup>17</sup> See Nguyen at column 6, lines 3-14.

<sup>18</sup> See In re Ratti, 270 F.2d 810, 813, 123 USPQ 349, 352 (reversing an obviousness rejection where the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.")

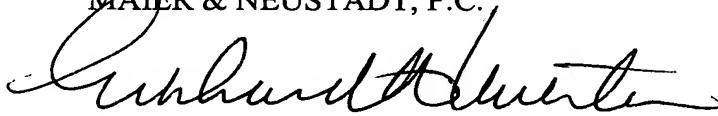
are believed to be patentable. Accordingly, Applicants respectfully request reconsideration of these rejections.

Consequently, in view of the present Amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-20 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

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